REMARKS

Applicant has carefully considered the April 20, 2005 Office Action, and the comments that follow are presented in a bona fide effort to address all issues raised in that Action and thereby place this case in condition for allowance. Claims 1 and 3-6 are pending in this application. It is believed that this response places this case in condition for allowance. Hence, prompt favorable reconsideration of this case is solicited.

Claims 1, 3 and 4 were rejected under 35 U.S.C. § 102(e) for lack of novelty as evidenced by Dennison et al (U.S. Pat. No. 6,117,721, hereinafter "Dennison"). Applicant respectfully traverses the rejection.

In the statement of the 35 U.S.C. § 102(e) rejection, the Examiner referred to Figs. 4 through 14, asserting the disclosure of a semiconductor device corresponding to that claimed including an active region bounded by isolation region 110, 112. The Examiner further determined that the active region is inclined downward toward the isolation region and that the active region is inherently rounded. The basis for the Examiner's determination that the active region is inherently rounded stems from the assertion that the method disclosed by Dennison corresponds to the method employed in the claimed invention, noting column 4 of Dennison, lines 15 through 47.

In response to the Amendment submitted on February 7, 2005, the Examiner maintained that the method disclosed by Dennison corresponds to the method of the present application and, therefore, the two corresponding processes would have necessary produced the same products. The Examiner asserted that no technological evidence or reasoning was submitted to demonstrate that the method disclosed by Dennison would not necessarily result in entirely rounding the

surface of the active region. Applicant respectfully requests reconsideration and withdrawal of the rejection for the reasons set forth below.

Applicant submits that the method disclosed by Dennison et al. would not necessarily result in entirely rounding the surface of the active region, as required by claim 1.

The factual determination of lack of novelty under 35 U.S.C. § 102 requires the identical disclosure in a single reference of each element of a claimed invention, such that the identically claimed invention is placed into the recognized possession of one having ordinary skill in the art. In order to rely upon the doctrine of inherency, the Examiner must provide a factual basis upon which to predicate the determination that an allegedly inherent result necessarily flows from the teachings of the applied prior art. Applicant submits that inherency may not be established by probabilities or possibilities. The mere fact that a certain thing may result from a given set of circumstances is not sufficient to establish inherency. Indeed, to establish inherency, the extrinsic evidence must make clear that the missing element must necessarily be present in the thing described in the reference, and that it would be so recognized by persons of ordinary skill. Applicant submits that the Examiner has not provided a factual basis upon which to predicate the determination that an allegedly inherent result necessarily flows from the teachings of Dennison.

The Examiner asserted that the active region in the access transistor of the device disclosed by Dennison is inherently, i.e., necessarily, rounded. However, claim 1, as amended, recites that the entire surface of the active region is rounded. In Dennison, the V_T ion implantation for forming the channel region of the access transistor is performed using the bird's beak regions as a mask. Thus, it is possible to enhance the concentration of the channel regions of the access transistor. Since the implant energy is selected such that ions do not penetrate the bird's beak regions (see col. 7, lines 55-57 of Dennison), the ions for forming the V_T implant 128

are only implanted into the central area, which is NOT covered with the bird's beak. Therefore, the V_T implant 128 formed by the above implantation concentrates in the central region 115 of the active area 114, as shown in Figure 7 of Dennison.

As the rounding process such as removing the bird's beak is not performed on the surface of the central regions 115, the central region 115 inherently has a flat surface. Accordingly, the above V_T implant 128 is formed in the central regions 115 having a flat surface. Since the flat area exists in the central region 115 of the active area 114 as mentioned above, it is inconceivable for the Examiner to suggest that the active area of Dennison is entirely rounded. In Dennison, only the surface of the peripheral regions 116 is rounded because the bird's beak regions 118 and 120 are stripped, the surface of the central region 115 above the V_T implant 128 is substantially flat, as shown in FIG. 10 of Dennison.

Based upon the foregoing technological reasoning it should be apparent that Dennison does not disclose or suggest, expressly or inherently, a semiconductor device as claimed comprising an access MOS (Metal Oxide Semiconductor) transistor formed on an active region bounded by an isolation region, wherein an entire surface of the active region is entirely rounded so as to be inclined downward toward said isolation region a bordering isolation region. This structural difference between the claimed invention and the semiconductor device disclosed by Dennison undermines the factual determination that Dennison disclose a semiconductor device identically corresponding to that claimed. Applicant, therefore, submits that the imposed rejection of claims 1, 3 and 4 under 35 U.S.C. § 102 for lack of novelty as evidenced by Dennison is not factually viable and, hence, solicits withdrawal thereof.

Dependent claims 5 and 6 were rejected under 35 U.S.C. § 103 for obviousness predicated upon Dennison in view of Ando et al (U.S. Pat. No. 5,285,096, hereinafter Ando"). This rejection is traversed.

Claims 5 and 6 depend from independent claim 1. Applicant incorporates herein the arguments previously advanced in traversing the imposed rejection of claim 1 under 35 U.S.C. § 102 for lack of novelty as evidenced by Dennison. The secondary reference to Ando does not cure the argued deficiencies of Dennison. Accordingly, even if the applied references are combined as suggested by the Examiner, and Applicant does not agree that the requisite fact-based motivation has been established, the claimed invention would not result.

Applicant, therefore, submits that the imposed rejection of claims 5 and 6 under 35 U.S.C. § 103 for obviousness predicated upon Dennison in view of Ando is not factually or legally viable and, hence, solicits withdrawal thereof.

Based upon the foregoing it should be apparent that the imposed rejections have been overcome and that all pending claims are in condition for immediate allowance. Favorable consideration is, therefore, solicited.

It is believed that all pending claims are now in condition for allowance. Applicant therefore respectfully requests an early and favorable reconsideration and allowance of this application. If there are any outstanding issues which might be resolved by an interview or an Examiner's amendment, the Examiner is invited to call Applicant's representative at the telephone number shown below.

To the extent necessary, a petition for an extension of time under 37 C.F.R. 1.136 is hereby made. Please charge any shortage in fees due in connection with the filing of this paper,

including extension of time fees, to Deposit Account 500417 and please credit any excess fees to such deposit account.

Respectfully submitted,

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